

# SDU-100B Series

100W Single Output U-Bracket DC-DC Converter



100W, Single output

18~56 DC Input

U Bracket Power Supply



133.5 x 84 x 38 mm

5.26 x 3.3 x 1.5 inch



## Features:

- \* Low inrush current, soft start function
- \* Input & output isolation
- \* Input polarity reverse protection
- \* Over voltage, over load & short circuit protection
- \* Output voltage  $\pm 10\%$  adjustment
- \* 100% full load burn-in test
- \* Meet UL 60950-1 & LVD standard
- \* 2 years warranty

## Specification:

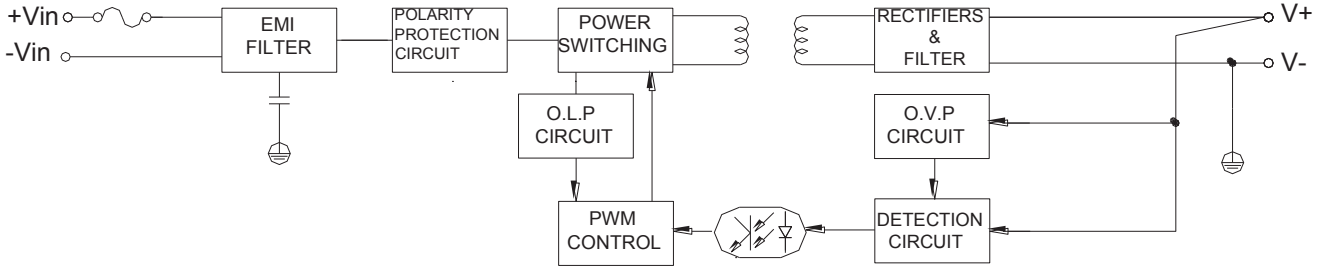
INPUT	<b>Voltage</b>	18 ~ 56V DC (Typical 24V)				
	<b>Current</b>	<8.0A@18V DC input , full load condition				
	<b>Protection</b>	Fuse, 15A/250V				
OUTPUT	<b>MODEL No.</b>	<b>SDU-100B3.3</b>	<b>SDU-100B05</b>	<b>SDU-100B12</b>	<b>SDU-100B24</b>	<b>SDU-100B48</b>
	<b>Voltage</b>	3.3V	5V	12V	24V	48V
	<b>Min Load</b>	0A	0A	0A	0A	0A
	<b>Max Load</b>	25A	20A	8.5A	4.2A	2.1A
	<b>Output Tolerance</b> ②	$\pm 3\%$	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	<b>Ripple Noise MAX.</b> ③	70mV	70mV	120mV	200mV	250mV
	<b>Efficiency (TYP.)</b>	66%	72%	75%	78%	80%
PROTECTION	<b>Output MAX.</b>	75W	100W	100W	100W	100W
	<b>Over Voltage</b>	3.8~4.6V	5.8~7.0V	13.8~16.8V	27.6~33.6V	55.2~67.2V
		Hiccup and recovers automatically after the fault is removed.				
	<b>Over Load &amp; Short Circuit</b>	When power supply over 105%~ 180% max load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed.				
ELEC.CHAR.	<b>Rise time</b>	<20mS				
ENVIRONMENT	<b>Temperature</b> ④	Operating: -10~70°C; De-rating: 45°C ~ 70°C: 2.5%/°C.; Storage: -20 ~ +85°C				
	<b>Humidity</b>	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)				
SAFETY	<b>Withstand voltage</b>	I/P-O/P:2.0KVAC, I/P-FG:0.5KVDC, 1minute				
	<b>Isolation resistance</b>	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C/ 70% RH				
EMC	<b>EMI</b>	EN 55022 CLASS B · FCC CFR 47 PART 15 CLASS B · CNS 13438 CLASS B.				
	<b>EMS</b>	EN 55024 : EN 61000-4-2,3,4,6,8 ; ENV 50204				
OTHERS	<b>Cooling</b>	Natural Cooling, When exceed output 80W, a 16 CFM (MIN.) DC fan is required.				
	<b>M.T.B.F</b>	270K hours				
	<b>Dimension</b>	133.5 x 84 x 38 mm (L*W*H)				
	<b>Packing</b>	N.W.: 0.5KG/1PC ; 30PCS / 1.20 CUFT / 1 CTN.				
NOTE		① All measurements which not mentioned are based on 24VDC input, <b>output Max</b> at ambient 25°C / 70%RH ② Output tolerance included set up voltage, line regulation and load regulation. ③ Ripple & noise are measured at 21~56VDC input with 10~50°C condition and 20MHz of bandwidth by using a 10" ~15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor. ④ The operating temperature shall follow the de-rating curve in spec ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.				

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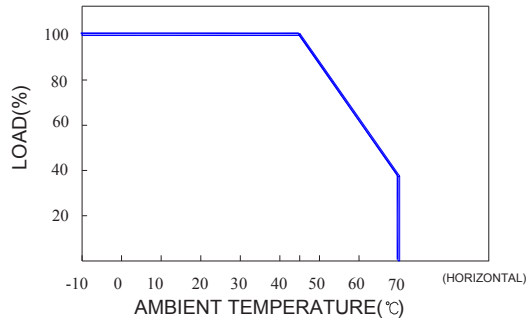
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## Block Diagram : DS1-1

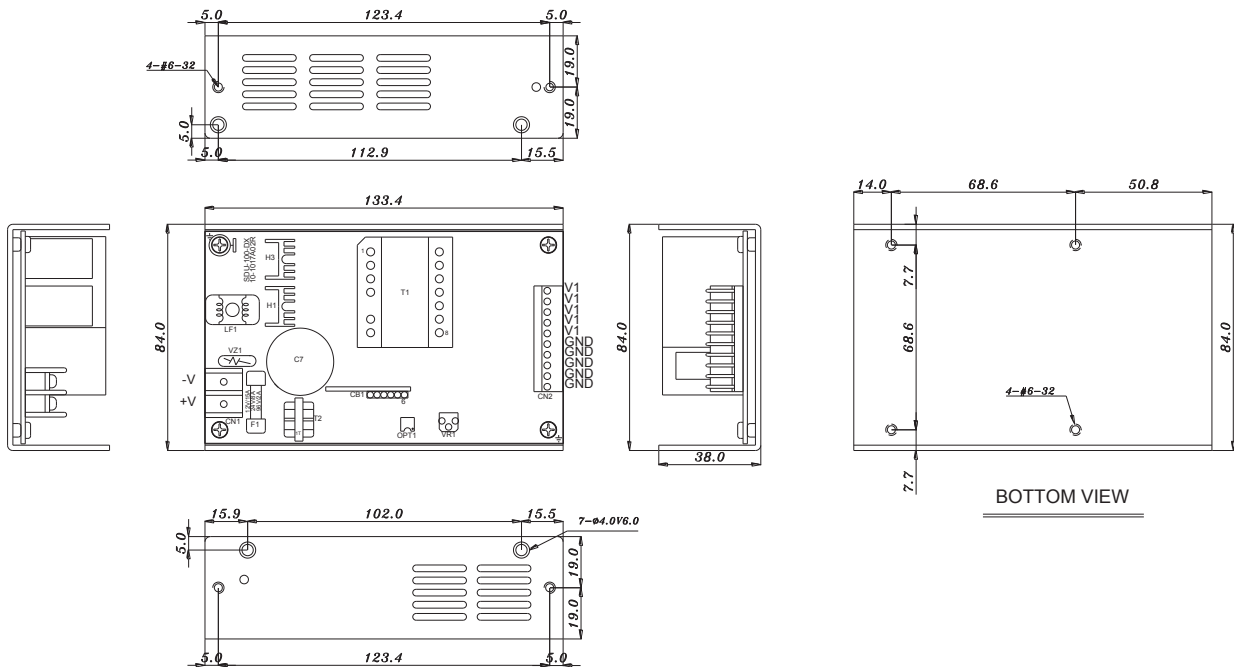


## De-rating Curve :



## Dimension:

(Unit: mm)



## NOTES:

- I/P: CN1, TML 2P P:8.25mm
- O/P: CN2, BASE 10P P:3.96mm